Appln. No.: 10/573,506

Amendment Dated October 1, 2009 Reply to Office Action of July 1, 2009

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A radio communication method including, a first channel in which a first radio communication device and a second radio communication device which are Ultra Wide Band (UWB) radio communication devices perform data communication, and which is in a sleep mode at an initial stage, and also a second channel in which communication is always possible, and which has lower power consumption than the first channel, comprising:

a step in which the first radio communication device transmits control information to the second radio communication device in the second channel, the control information including communication time reservation request information in which a time slot when data transmission will be performed is written;

a step in which the second radio communication device receives the control information in the second channel and puts the first channel in a data reception operating mode; and

a step in which after transmitting and receiving of data are performed in the first channel between the first radio communication device and the second radio communication device, the reception in the first channel is returned to the sleep mode;

a step in which if the communication time reservation request information included in the received control information is addressed to the second radio communication device, in the second channel it transmits communication time reservation response information in which information notifying that communication reservation addressed to the second radio communication device has been received is added to the communication time reservation request information;

a step in which a third radio communication device located in an area where communication is possible with the first radio communication device or the second radio communication device or both receives the communication time reservation request information from the first radio communication device or the communication time reservation response information from the second radio communication device or both in the second channel, and stores the time slot written in the communication time reservation request information or the

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communication time reservation response information as a transmission prohibition time slot, together with an identifier of the first radio communication device and an identifier of the second radio communication device in a communication prohibition table; and

a step in which the third radio communication device decides a time slot in which its own transmission and reception are possible, based on the communication prohibition table, and

wherein the first radio communication device transmits data using the second channel in the time slot designated by the communication time reservation request information.

- 2. (Original) The radio communication method according to claim 1, wherein both the first radio communication device and the second radio communication device are UWB radio communication devices, and in which the first channel is a wideband transmission channel and the second channel is a narrowband transmission channel whose modulation and demodulation rates are set to be less than or equal to a predetermined value.
 - (Cancelled)
- 4. (Original) The radio communication method according to claim 1, further comprising:

a step in which the second radio communication device requests the first radio communication device to transmit communication time reservation request information using the second channel, and

wherein the first radio communication device transmits the control information in response to the request from the second radio communication device in either the first channel or the second channel.

- 5. (Original) The radio communication method according to claim 1, wherein the first radio communication device further performs multicasting to the second radio communication device in the second channel.
- 6. (Currently Amended) A receiver, second radio communication device communication with a first communication device and a third communication device, the second communication device comprising:

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a first receiving unit receiving a preamble in a narrowband channel in which reception is always possible, the first receiving unit receiving control information from the first radio communication device including communication time reservation request information in which a time slot when data transmission will be performed;

a second receiving unit receiving data in an <u>Ultra Wide Band (UWB)</u> channel, and which can save power; and

a communication data selection unit controlling the power saving in said second receiving unit in the case where the communication data selection unit receives the preamble from said first receiving unit, and

wherein said communication data selection unit puts said second receiving unit in a power saving mode, and when said communication data selection unit receives the preamble from said first receiving unit, said communication data selection unit cancels the power saving mode in said second receiving unit and conducts reception of data in the UWB channel,

wherein the communication time reservation request information included in the received control information is addressed to the second radio communication device, in the narrowband channel it transmits communication time reservation response information in which information notifying that communication reservation addressed to the second radio communication device has been received is added to the communication time reservation request information,

wherein the third radio communication device located in an area where communication is possible with the first radio communication device or the second radio communication device or both receives the communication time reservation request information from the first radio communication device or the communication time reservation response information from the second radio communication device or both in the narrowband channel, and stores the time slot written in the communication time reservation request information or the communication time reservation response information as a transmission prohibition time slot, together with an identifier of the first radio communication device and an identifier of the second radio communication device in a communication prohibition table,

wherein the third radio communication device decides a time slot in which its own transmission and reception are possible, based on the communication prohibition table, and

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wherein the first radio communication device transmits data using the narrowband channel in the time slot designated by the communication time reservation request information.

7. (Currently Amended) A receiver, second radio communication device communication with a first communication device and a third communication device, the second communication device comprising:

a first receiving unit receiving control information in a narrowband channel in which reception is always possible, the first receiving unit receiving control information from the first radio communication device including communication time reservation request information in which a time slot when data transmission will be performed;

a second receiving unit which receives data in an <u>Ultra Wide Band (</u>UWB) channel, and which can save power;-and

a communication data selection unit controlling the power saving in said second receiving unit by judging whether the control information received by said first receiving unit is addressed to that receiver or not, and

wherein said communication data selection unit puts said second receiving unit in a power saving mode, and cancels the power saving in said second receiving unit when said communication data selection unit receives control information addressed to said communication data selection unit from said first receiving unit to receive data in the UWB channel,

wherein the communication time reservation request information included in the received control information is addressed to the second radio communication device, in the narrowband channel it transmits communication time reservation response information in which information notifying that communication reservation addressed to the second radio communication device has been received is added to the communication time reservation request information,

wherein the third radio communication device located in an area where communication is possible with the first radio communication device or the second radio communication device or both receives the communication time reservation request information from the first radio communication device or the communication time reservation response information from the

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second radio communication device or both in the narrowband channel, and stores the time slot written in the communication time reservation request information or the communication time reservation response information as a transmission prohibition time slot, together with an identifier of the first radio communication device and an identifier of the second radio communication device in a communication prohibition table,

wherein the third radio communication device decides a time slot in which its own transmission and reception are possible, based on the communication prohibition table, and

wherein the first radio communication device transmits data using the narrowband channel in the time slot designated by the communication time reservation request information.

- 8. (Cancelled)
- 9. (Cancelled)
- 10. (Cancelled)
- 11. Cancelled)
- 12. (Cancelled)